



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,129	04/18/2001	Misaki Ishida	3274-010528	7371
7590	03/15/2005			EXAMINER WANG, SHENGJUN
Kent E. Baldauf 700 Koppers Building 436 Seventh Avenue Pittsburgh, PA 15219-1818			ART UNIT 1617	PAPER NUMBER
DATE MAILED: 03/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/837,129	ISHIDA ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Shengjun Wang	1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 November 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3, 16 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3, 16 and 19-22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 24, 2004 has been entered.

### ***Claim Rejections 35 U.S.C. 112***

a. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-3, 16 and 19-22 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The chemical structures recited in the claims lack support from the application as originally filed. Note the structures in the claims miss a double bond compared to those in the specification.

### ***Claim Rejections 35 U.S.C. 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1617

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 16, 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hadas et al. (GB 2,259,014, of record), in view of Swift (US 3,598,841, of record), and JP 08337534 (English translation by computer is attached hereto), and in further view of Machida et al. (IDS AS) and Sarin et al. (IDS, AS).

5. Hadas et al. teaches a composition for skin whitening comprising a flavonoid and ascorbic acid or its derivatives, wherein the flavonoid may be a plant extract. (see the abstract). Hadas further teaches that kojic acid enhances the whitening effect of flavonoid and ascorbic acid and its derivative through a synergistic effect (see page 19, lines 17-27). The composition may further comprise other well-known cosmetic ingredients. See the examples.

6. Hadas et al. does not teach expressly the employment of citrus unshiu extract as the source of flavonoid.

7. However, Swift teaches citrus peels is well known to containing significant amount of flavonoids herein employed. See, particularly, column 1, lines 31-35. JP 08337534 teaches that the organic extract of citrus unshiu is particularly useful in cosmetic product for whitening skin, wherein the amount of the extract is about 0.005 to 0.1 % by weight. See, particularly, the abstract.

Therefore, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to make a composition according to Hadas by employ the citrus unshiu extract.

Art Unit: 1617

A person of ordinary skill in the art would have been motivated to make a composition according to Hadas by employ the citrus unshiu extract because citrus unshiu extract is known to containing flavonoid herein, and is particularly known for the usefulness as skin whitening agent.

As to the method of preparing the extract, note it would have been an obvious alternative by employing a purified, or concentrated extract, to a crude extract. Purifying or concentrating a composition with known active ingredients is seen as a routine experiment, and would have been within the skill of artisan. See the entire documents of Machida et al. and Sarin at al., wherein flavonoids are concentrated, or purified by similar procedure herein employed, i.e., solvent extraction, and liquid chromatography. Further, note the claimed method merely recite "subjecting it to liquid column chromatography" and without specifying detailed steps involved in the chromatographic procedure as to how well the mixture are separated into pure compounds. Therefore, the claims read broadly as the final extract being a mixture comprising the compounds defined in claim 2.

#### *Response to the Arguments*

Applicants' amendments and remarks submitted November 24, 2004 have been fully considered, but are not persuasive.

8. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The cited references as a whole would have fairly suggested the claimed invention. Particularly, It is generally known that flavonoids are useful for in cosmetic composition skin whitening (Hadas), the particular

pentamethoxyflavone was known presented in citrus unshiu (Swift), and the extract of citrus unshiu was particularly known to be useful in cosmetics composition for whitening skin (JP 08337534). A person of ordinary skill in the art possessing the such knowledge, would have reasonable expectation that a purified flavone fraction of extract citrus unshiu be useful in cosmetic composition for whitening skin. Note the difference between the instant claims and those disclosed by JP 08337534 is the purity, which does not render any significant, unexpected results. They function essentially the same. Further, the particular flavonoids herein recited are old and well-known and the process of isolation of those compounds is deemed to be obvious as shown by of Machida et al. and Sarin at al. Further, it is noted the claims herein are products by process claims. It is well-settled that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

If applicants believe that the envisioned invention resides on some unexpected benefit, applicants should bring this forward. Regarding the establishment of unexpected results, a few notable principles are well settled. It is applicant’s burden to explain any proffered data and establish how any results therein should be taken to be unexpected and significant. See MPEP 716.02 (b). The claims must be commensurate in the scope with any evidence of unexpected results. See MPEP 716.02 (d). Further, A DECLARATION UNDER 37 CFR 1.132 must

Art Unit: 1617

compare the claimed subject matter with the closest prior art in order to be effective to rebut a prima facie case if obviousness. See, MPEP 716.02 (e).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SHENGJUN WANG  
PRIMARY EXAMINER  
Shengjun Wang  
Primary Examiner  
Art Unit 1617